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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,580	02/09/2001	Gerard Hotier	PET1913	5248
23599	7590	08/11/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			CINTINS, IVARS C	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/762,580

Applicant(s)

HOTIER ET AL.

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13, 18, 20, 21 and 23-25 is/are rejected.
- 7) ☒ Claim(s) 4-12, 14-17 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Initially, Applicant is again reminded (see page 3, first full paragraph of the previous Office communication) that "cancel" is not one of the seven permitted claim status identifiers. Accordingly, all future responses must include the term "(canceled)" following claim 19, and following any other claims which may be subsequently canceled. Failure to do so will result in a holding of non-compliance with 37 CFR 1.121.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 13, 18, 20, 21 and 23-25 are rejected under 35 U.S.C. 102(a) as being anticipated by French Patent No. 2,772,634. The reference discloses a simulated moving bed process and apparatus of the type recited, and further shows (see Fig. 1) a bypass line (e.g. L<sub>1,2</sub>) having an end connected to a distribution chamber (i.e. 13), and a second end connected to a "zone" of an adsorbent bed (i.e. chamber 23) which is distinct from the first distribution chamber 13.

Claims 1-3, 13, 18, 20, 21 and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Hotier et al. (U.S. Patent No. 5,972,224) or Ferschneider et al. (U.S. Patent No. 6,146,537). Each of the references discloses a system for separating paraxylene from aromatic hydrocarbons of the type recited (see col. 9, line 54 of Hotier et al.; and col. 8, lines 22-23 of Ferschneider et al.) with a simulated moving bed system comprising a

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bypass line (e.g.  $L_{1,2}$  of Hotier et al.; and  $L_{i,j}$  of Ferschneider et al.) and a rotary valve (see col. 10, line 26 of Hotier et al.; and col. 9, line 1 of Ferschneider et al.). Again Applicant should note that the bypass line in each of these references includes an end connected to a distribution chamber ( $13$  of Hotier et al.; and  $CH_i$  of Ferschneider et al.), and a second end connected to a “zone” of an adsorbent bed (i.e. chamber  $23$  of Hotier et al.; and  $CH_j$  of Ferschneider et al.) which is distinct from the first distribution chamber.

Claims 4-12, 14-17 and 22 are objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed May 27, 2004 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that the bypass line of the reference systems is connected to two distribution chambers, whereas the claims of this application do not read on such a construction. It is pointed out, however, that the bypass line recited in claim 1 merely requires that one end of the bypass line communicate with a zone which is “distinct from a distribution chamber,” but does not preclude this one end from being connected to a second (i.e. different) distribution chamber. Similarly, claim 18 merely requires that one end of the bypass line be connected to a zone of an adsorbent bed distinct from a chamber ( $C_i$ ), but does not preclude the presence of another distribution chamber in this recited “zone.”

Accordingly, the bypass line recited in claims 1-3, 13, 18, 20, 21 and 23-25 is not deemed to distinguish over the bypass lines in any of the above noted reference systems.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at (571) 272-1166.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ivars C. Cintins  
Primary Examiner  
Art Unit 1724

I. Cintins  
August 7, 2004